EDITORIAL COMMENT

Live Case Demonstration of Interventional Cardiology Procedures

Is It Really Safe?*

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In this issue of JACC: Cardiovascular Interventions, Eliyahu et al. (1) are certainly attempting to address a very important issue confronting the interventional community as we all try to maximize patient safety while teaching techniques required for new and sometimes more complex technologies. The authors summarize their own cumulative “live demonstration” outcomes spanning 15 years, 101 patients, and 5 different interventional procedures, and do a very good job of capturing all the technical issues that differentiate a live from a routine case. They also describe their study design and primary safety and efficacy endpoints as well as a comparison of their study group to a matched control group.

In summary, they determine that “for patients who are carefully selected and treated by an experienced team, the stressful conditions that are associated with live case transmissions do not jeopardize patient safety and procedural efficiency.” On the basis of their careful analysis of their patients, I believe the authors have come to the correct conclusion, and perhaps I feel reassured because it agrees with my perspective developed over more than a few years in the space.

That being said, all my personal experiences with live cases have not been as favorable as that of the authors. As they have described, there seem to be countless concerns with regard to live cases, but 2 in particular stand out in my mind. The first is patient selection, of course, and the second is a combination of operator experience and sometimes, almost as important, patient selection, of course, and the second is a combination of live cases, but 2 in particular stand out in my mind. The first is described, there seem to be countless concerns with regard to procedures that are associated with live demonstration does not jeopardize patient safety and procedural efficiency.” On the basis of their careful analysis of their patients, I believe the authors have come to the correct conclusion, and perhaps I feel reassured because it agrees with my perspective developed over more than a few years in the space.

That being said, all my personal experiences with live cases have not been as favorable as that of the authors. As they have described, there seem to be countless concerns with regard to live cases, but 2 in particular stand out in my mind. The first is patient selection, of course, and the second is a combination of operator experience and sometimes, almost as important, operator comfort with the live transmission environment. I know we all try to do representative cases during a live telecast, but the bias derived from always wanting the safest and best outcome

for the patient inevitably drives me toward avoiding cases that appear to be the most difficult. It is unrealistic also not to acknowledge that most interventionists are fairly normal human beings and have the same fear of public failure and embarrassment that is seen in all segments of our society. Any interventionist who says these issues are of no concern is suspect in my mind. I actually think the fear of failure and embarrassment is that element that most ensures the patient's safety. I have yet to see or participate in a live transmission where none of the physicians seemed to care about the outcome.

The risk could then be that the operator is so afraid to fail that he or she makes mistakes in judgment or technique that cause patient harm. I think this occurrence is truly rare, and I am not sure I have seen it. More often than not, a case that is not likely to work is terminated with the plan to try again later as the technology gets better, or in the coronary space, proceed with routine bypass surgery. Some cardiologists do consider converting to bypass a failure, but that is a topic for discussion in a different forum. The authors also nicely summarize the role of the Food and Drug Administration in providing oversight over live cases in particular as it relates to using unapproved devices. My hope is that government involvement in live case oversight is approached carefully and thoughtfully, and not in a way that interferes with the educational value of this format; which I remain convinced is one of the most effective available to the interventional community.

I understand the difficult task of the writing committee mentioned by the authors that led to the conclusion: “After evaluating the pros and cons of live case demonstrations and the available data, the writing committee cannot determine if the educational benefits of live case demonstrations outweigh any potential negative consequences.” I have had the rare privilege to participate in and watch the growth and development of this teaching modality since angioplasty was introduced by Andreas Gruentzig, MD, over 30 years ago. Given my experiences, I cannot imagine a better way to teach interventional techniques, and I perceive the value to far outweigh any potential negative consequences. I remain a strong believer that it is the ubiquitous fear of failure that makes it safe for the patient and valuable for the physician.

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REFERENCE


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